Periscope

MONATSSCHRIFT FUER PSYCHIATRIE UND NEUROLOGIE

(Vol. 14, 1903, No. 5, November.)

1. A Contribution to the Question of Spinal Centers of Certain Peripheral Nerves in the Dog. M. Lapinsky.
2. The Medulla Oblongata of the Nycticebus Javanicus. D. M. van Londen.
3. Contribution to the Knowledge of Progressive Facial Hemiatrophy. O. Fischer.
4. The So-called Galloping Paralysis, with Remarks Upon the Symptomatology and Pathological Anatomy of this Disease. H. Weber.
5. Subsequent Remarks Upon the Reflex Movement in Diplegia Spastica Infantilis, Described in Heft 4 of this Volume. H. Oppenheim.
6. The Meeting of the German Natural Historians and Physicians in Cassel, September, 1903, with a Section for Neurology and Psychiatry. Lilienstein.

1. *Spinal Centers in Dogs.*—Lapinsky injured various peripheral nerves in dogs, either by resection or ligation, occasionally ligating at the same time the arteries, and then at the end of a week or two killed the dogs and made serial sections of the spinal cords, which were stained by method. In this manner he was able to determine exactly the centers for the various peripheral nerves. The results are described at length and then tabulated, but the tabulation is so long that it is necessary to refer to the original paper. He also reaches certain general conclusions which are of interest. First, that certain nerve trunks arise from the various groups of cells which usually belong to different segments of the spinal cord. On the other hand, each group of cells supplies various peripheral nerves. As a result the spinal centers cannot be sharply separated one from another. Second, the group of muscles of one of the segments of the limbs obtains its fibers also from various groups of cells situated in various segments of the spinal cord. These groups of cells also supply other nerve plexuses. Therefore, it cannot be said that the centers of the plexuses have any individuality. Third, it is impossible to determine the position of the centers for the various nerve trunks, either histologically, physiologically, or even as a result of pathological and anatomical investigations. Consequently, the motor functions of the spinal cord cannot be localized, either according to spinal centers or to the centers of a peripheral nerve. Fourth, the contention of Brissaud, De Neeff, 'Nellis, van Gehuchten and other authors, that certain segments of the extremities are dominated by centers of nuclei which are isolated in the spinal cord, is difficult to prove. It must, of course, be remembered that Lapinsky's work applies only to the dog.

2. *Comparative Neurology.*—Van Londen gives a careful description, well illustrated, of the medulla oblongata of the *Nycticebus Javanicus.* It is not adapted to abstraction.

3. *Facial Hemiatrophy.*—Fischer reports an additional case of progressive facial hemiatrophy. At seven years of age the patient had had scarlet fever, and a year later a brown spot was noticed on the right side of the neck. This gradually enlarged, and atrophy of the right side of the face commenced. There was paralysis of the muscles of the face and the usual changes in the skin. The changes appeared to have commenced

at the embryonal points of closure in the neck and face. An analysis of forty carefully reported cases in which atrophic spots were present in the skin, showed that in thirty-three the spots were present at the embryonal points of closure, and in thirteen of these cases, also in other points. Fischer discusses the other causes, especially traumatism and the trophic nervous disturbances. He believes that we have two factors: a general and a local. The general, he agrees with Moebius, is probably a toxin, and the local either a congenital disturbance or an injury received later in life.

4. *Galloping Paralysis.*—Weber gives the following characteristics of galloping paralysis. The course is shorter—usually from one-half to one year. The death must be due to the disease and not to some complication. After a brief prodromal stage there is delirious excitement, confusion, disturbance of consciousness, and in a short time death. The physical signs consist of facial paresis, disturbance of speech, ataxia and changes in the reflexes. Pathologically there is found hyperemia of the blood vessels, round cell infiltration in their walls, and the appearance of neuroglia cells in the cortex. He reports a case occurring in a man thirty-four years of age, who had had syphilis. He was degenerate. His character had always been peculiar, and in June, 1902, he became gradually excited. In the latter part of July he had delusion of grandeur, rapidly grew worse, and in January, 1903, died. The microscopical examination of the brain showed a superficial leptomeningitis; no especial changes in the blood vessels, neuroglia or nerve cells, and there was a slight disappearance of some of the nerve fibers.

5. *Diplegia Spastica.*—Oppenheim discusses the reflex movements observed by him in two cases of spastic infantile diplegia, and states that he found them also in a case of post-epileptic coma occurring in an old woman.

(Vol. 14, 1903, No. 6, December.)

1. The Composition of the Posterior Columns of the Spinal Cord. K. Goldstein.
2. A Case of Acute Uncomplicated Paralysis of Touch. A. Knapp.
3. Contribution to the Clinical Knowledge of Periodic Psychoses. A. Pilcz.
4. Studies of Metabolic Changes Resulting from Cerebral Activity and Prolonged Wakefulness. Mainzer.
5. The So-called Galloping Paralysis, with Remarks Upon the Symptomatology and Pathological Anatomy of this Disease. H. Weber.
6. The Ninth Assembly of the Middle German Psychiatrists and Neurologists in Leipzig, October, 1903. H. Haenel.
7. The Seventy-fifth Meeting of the German Natural Historians and Physicians in Cassel, September, 1903, with a Section for Neurology and Psychiatry. Lilienstein.

1. *Posterior Columns.*—Goldstein has made a careful study of the tracts of so-called endogenous fibers in the spinal column, namely, the dorsal mediosacral tract of Obersteiner, the oval field of Flechsig, the tract of Hoche, the comma tract of Schultze, and the so-called ventral field. He had the following cases: One of compression of the corda equina without injury to the spinal cord, and one of tabes dorsalis. The microscopical changes are minutely described, and each of the five tracts mentioned subjected to special analysis. He then attempts to determine whether all these tracts are essentially the same, and whether they contain endogenous or exogenous fibers. It appears that there is a communication between the fibers in the sacrolumbar tract and in Hoche's and Schultze's tracts. Although it is impossible to answer the second question definitely, Goldstein is of the opinion that it is more likely that the tracts are made up of

exclusively exogenous fibers. The literature has been very carefully studied.

2. *Touch Paralysis.*—A man of forty-four years was bitten in the leg by a dog, which may have had hydrophobia. There was local suppuration. Seven years later he suddenly lost the power of sensation in the left hand. This returned in two weeks. Later he had an attack of clonic spasm of the left side of the face, lasting for about three hours. Still later he had a feeling of numbness in the left hand. His general health was excellent. When examined it was found that he had complete loss of the stereognostic sense in the left hand. It seems likely that the cause was a small hemorrhage into the parietal lobe.

3. *Periodic Psychoses.*—Pilcz reports a series of cases of periodic psychoses. One, a man of thirty years, with neuropathic heredity, had attacks coming on acutely, terminating by lysis, and always characterized by a preliminary loss of weight with increase towards the end of the attacks. The attacks were also chiefly characterized by hallucinations of sound, and from time to time paroxysms of rage, with cyanosis. In the second case, a Jewess of fifty years, with neuropathic heredity, the disease commenced at the age of thirty-eight acutely, with manifestations of melancholia. Later there was an attack of mania and then lytical recovery. The duration of the melancholic period was more than four years, and the maniacal nearly as long. The second period followed almost immediately after the first, and the patient did not recover until June, 1903. During the period of recovery there was considerable increase in the body weight. Pilcz gives the subsequent history of some cases that he had previously reported. In one of these recovery seemed to be due to a suppurative periostitis of the jaw. Altogether he has collected seventeen cases in which an intercurrent disease appeared to produce recovery.

4. *Metabolism in Disease.*—Mainzer has performed some very elaborate experiments in metabolism in order to determine the effect first, of intellectual work, and second, of prolonged wakefulness. The results were somewhat disappointing. The relation of the phosphoric acid to nitrogen showed no constant variation. Prolonged wakefulness did not increase the amount of the imperfectly oxydized nitrogen in the urine, in fact, distinctly the opposite occurred. At present a sufficient number of experiments have not been made to enable us to determine exactly what changes occur.

(Vol. 15, 1904, No. 2, February.)

1. Histological Investigations Upon the Nerve Endings in the Tendons and in the Perimysium of Rats and Guinea Pigs. G. Cabibbe.
2. Experimental and Pathologico-anatomical Investigations Upon the Course of Certain Nerve Tracts in the Central Nervous System. G. Mingazzini.
3. The Neuro-pathological Valuation of Nocturnal Enuresis and Similar Disturbances. H. Pfister.
4. Certain Defects and Difficulties in the Classification of Mental Diseases. Th. Ziehen.
5. The Origin and Course of the Oculo-motor Nerve in the Mid-brain. St. Bernheimer.

1. *Nerve Endings.*—Ruffini's method consists in placing fragments of non-parenchymatous tissue first in a solution of formic acid and then in a solution of gold chloride. After the impregnation is complete the tissues are teased and mounted on cover glasses. Two types of sensory bodies were found, the Pacini and the Golgi bodies, or spindles. They showed an extraordinary diversity in structure and arrangement. Occasionally the different bodies appeared to be in contact, although Cabibbe expressly refrains from stating that they are united.

2. *Nerve Tracts and Endings.*—Mingazzini describes the histological changes in five additional brains. In the first, a monkey, the left half of the cerebellum, a portion of the vermiform process, and part of the left half of the medulla oblongata were removed three years before the animal was killed. For the details of the histological changes of this and the following cases the reader must be referred to the original. The second case was a man who had observed one morning that his mouth was drawn to the right. Later his mind weakened, and he had periods of maniacal excitement. There was some paresis of the left side, and some disturbance of touch and pain in the same region. Romberg's phenomenon was present; there was slight dysarthria and paralysis of the sphincters. The patient died of chronic external pachymeningitis, and a hemorrhagic cyst was found in the right thalamus. The microscopical examination is given minutely. The third case, a boy of seventeen, had commenced to have epileptic attacks at the age of five or six years. In walking the patient fell to the right and forward. There was almost complete anesthesia on the right side. The epileptic attacks were frequent. A tumor was found springing from the surface of the right caudate nucleus and involving the right optic thalamus. The posterior portion of the third ventricle was obliterated. This tumor consisted of neuroglia. The changes in the various tracts are carefully described. The fourth case was a female infant suffering from microcephalus, that died at the age of two months. The weight of the brain was 105 gm., the circumference of the head 270 millimeters. The diminution in size chiefly concerned the cerebral hemispheres, of which the right was smaller than the left. The pyramids were entirely absent. On the left side the island of Reil was exposed, and showed no convolutions; the frontal lobes were comparatively strongly developed. The occipital lobes were entirely deficient. The fifth case, a man of forty-one, was born with paralysis of the right side. He was an imbecile from birth, was usually apathetic, occasionally excited, speech was confined to a few simple words expressing primitive ideas; he had never learned to write. There was paresis of the left side of the face. A cyst about the size of a pigeon's egg was found in the left frontal lobe. There was atrophy of many of the structures on the left side, and the anterior horn of the left ventricle was dilated. The pyramidal tract in all parts rising from the left side of the brain was atrophic. A small area of softening was found at the base of the left posterior corpus quadrigeminum. The paper is still unfinished.

3. *Nocturnal Enuresis.*—Pfister reports twenty cases of nocturnal enuresis. He divides them into two groups: first, characterized by the fact that control of the bladder was not acquired as the child advanced in age; second, in which enuresis did not develop until comparatively late (after the fifth year), and then was not common. In this latter group the enuresis can usually be regarded as an accompanying sign of epileptic discharges, rarely of hysterical attacks. Essential enuresis occurs most frequently at night, occasionally in the daytime, and is often aided by various emotional disturbances, such as laughing, or by convulsive movements, such as sneezing or coughing. It is not a symptom of any particular disease, but is really a stigma of disturbances in development, either in the form of a slow completion of some of the tracts, or of a disposition to some nervous or psychical disease. It often occurs as a familial disturbance.

4. *Classification of Mental Disease.*—Ziehen calls attention to certain requirements in a study scheme for the classification of mental disease. He discusses the difficulties of an etiological classification. There is great difficulty, too, in classifying properly the emotional forms of psychoses and transitional forms. More attention should be paid to the individual variations.

5. *Oculo-motor Nerve.* St. Bernheimer writes a controversial article.

(Vol. 15, 1904, No. 3, March.)

1. Hysterical States of Confusion and Talking at Random. J. VORSTER.
2. The Behavior of the Reflexes in Brain Tumors. A. REH.
3. A Case of Speech Disturbance. W. ALTER.
4. Porencephaly and Cerebral Infantile Paralysis: A Contribution to the Psychopathological Nomenclature. SOMMER.
5. Experimental and Pathologico-anatomical Investigations Upon the Course of Certain Nerve Tracts in the Central Nervous System. G. MINGAZZINI.

1. *Hysterical States.*—Vorster reports five cases of hysterical confusional states, all showing marked neuropathic heredity. Four were men under twenty-five, and the fifth was a woman of thirty-four. For the symptoms in the individual cases reference must be made to the original article. The author briefly discusses the literature.

2. *Reflexes in Brain Tumors.*—Reh has tabulated 100 cases of brain tumor with reference to the reflexes, the clinical symptoms and the pathological findings. He found that in thirty-four per cent. the patellar reflexes were diminished; in thirty-six per cent. they were increased, and in the remaining cases were normal. In a few of the cases the diminution was unilateral, and usually on the same side as the tumor. The position of the tumor did not appear to be of great influence. Increase in the brain pressure sometimes caused diminution of the reflexes. Degeneration of the posterior columns of the cord was present in twenty-two of the thirty-two cases examined. In the majority of these cases tumors were found in the cerebrum, and choked disc was present. In some cases the reflexes were diminished, but in only a slightly less number they were increased. The literature is very complete.

3. *Speech Disturbance.*—The patient had had an apoplectic attack followed by brachial monoplegia, hemianopsia and aphasia. The latter was of the type of dysarthria. From time to time he had attacks in which he would remain quiet for some time, then commence to articulate in a loud voice various combinations of the R with the vowels, the rhythm of his speech resembling that of ordinary speech composed of words and sentences. When he attempted to repeat words he used the same combinations, but there was a distinct effort at imitation. Later he was able to add a K to his combinations. The attack lasted about ten days, when the patient returned to his previous dysarthric condition. Several subsequent attacks occurred in which the speech was limited to a few consonants and the vowels. Alter regards the lesion as probably cortical in nature. The curious attacks are probably glosso-psychical in nature. He offers some theoretical considerations regarding the inter-relation of the higher psychical and the speech centers.

4. *Porencephaly.*—Sommer contributes an article upon the significance of the word "porencephaly." He regards it as indicating those disturbances of the brain associated with idiocy and epilepsy, and characterized by cavity formation in the brain, that is, a defect of the brain substance.

5. *Nerve Tracts*—Mingazzini continues his careful description of the central nervous system. The paper is still unfinished.

(Vol. 15, 1904, No. 4, April.)

1. Retrograde Amnesia after an Attempt at Strangulation, and After Injury to the Head. E. HESS.
2. A Case of Touch Paralysis and Jacksonian Epilepsy, and the Favorable Results of the Removal of Adenoid Vegetations. A. KNAPP.

3. Experimental and Pathologico-anatomical Investigations Upon the Course of Certain Tracts of the Central Nervous System. G. Mingazzini.
4. A Case of Psychical Disturbance of the Motor Functions with the Predominant Involvement of Speech. W. Försterling.
5. Neurasthenic Melancholia. M. Friedmann.
6. The Fatigue Curve of Healthy Persons and in Patients Suffering from Neuroses and Psychoses. Breukink.

1. *Retrograde Amnesia.*—Hess discusses the subject of retrograde amnesia after attempts at strangulation, and reports three cases. The first, a man of thirty-six years, a chronic drunkard with neuropathic heredity, attempted to hang himself and was rescued, experiencing no bad effects. At a second attempt he was entirely unconscious when cut down and had no recollection of the attempt. His mental state resembled closely that of dementia præcox. A second case, a man of twenty-two years, injured his head while riding a bicycle. When he had recovered consciousness he had forgotten all the events of the day on which the accident occurred. Four months later his memory had returned completely. It is possible, however, that this return of memory was merely simulated, and that his knowledge of the events was derived from conversation with his family and companions. The third case, a woman of forty-two years, was injured in a railroad accident. There was a severe wound on the head, and more or less general shock. There was complete loss of recollection of all that had happened for some time before the accident. In three or four weeks her memory had returned, but she then lost the recollection of having had the amnesia. Hess is if the opinion that the return of memory in this case also was merely apparent, and that actually she had learned of all the events from conversation with others. The loss of memory of the amnesic period was probably due to insufficient introspective capacity. He also suggests a rather original explanation of some of these cases of retrograde amnesia. In the majority of instances the patients have been taking more or less severe exertion, or have been drinking—sometimes both, and he had observed that under these circumstances persons become drowsy and perception is diminished. This is particularly apt to occur during bicycle riding or marching. Of course, there is no recollection of what has been done during these periods of sleep with action. Retrograde amnesia is probably fairly common, but often the defect in memory is corrected before the physician sees the patient, in the manner in which it was apparently corrected in two of the reported cases.

2. *Touch Paralysis.*—A boy of seven had an epileptic attack followed by weakness and numbness of the left side. There was complete astereognosis of the left hand without loss of touch sense, and with partial loss of position sense. Adenoid vegetations were found in nose and removed. The symptoms immediately improved, but the epileptic attacks continued. The stereognostic sense, however, was greatly improved. About four months later the epileptic attacks had practically disappeared, and there was only a slight increase in the reflexes on the left side. Knapp supposes that there was a cortical lesion insufficient of itself to produce the epilepsy, but in the presence of adenoid vegetations, which interfered with respiration, the epileptic attacks could occur.

3. *Nerve Tracts.*—Mingazzini discusses some of the results of his investigations regarding the course of the fibers in the central nervous system. It is impossible properly to give these results in abstract.

4. *Psychical Disturbance and Speech.*—Försterling reports the case of a woman, thirty-seven years of age, with neuropathic heredity, who became restless, irritable and had attacks in which she screamed at regular intervals for considerable periods of time. There was a continuous disposition to speak. There was also an epileptic attack.

5. *Neurasthenic Melancholia.*—This syndrome is usually characterized by the simplicity of its symptoms. Friedmann discusses particularly the question whether there is a sharp differentiation between the neurasthenic melancholia and the true psychosis, and whether the distinction between the two conditions can be more exactly made. The paper is still unfinished.

6. *Fatigue Curve Studies.*—Breukink has employed the ergograph of Kraepelin for the purpose of determining the fatigue curves in various conditions. In hysteria there is often sudden interruption in the movements. In neurasthenia there is occasionally a concavity of the upper points of the line. In chorea the contractions are irregular, and in various forms of hemiparesis the movements are less frequent. In progressive muscular dystrophy the frequency of movements was nearly normal, but their amplitude decreased rapidly.

(Vol. 15, 1904, No. 5, May)

1. Contribution to the Knowledge of So-called Original Paranoia. A. SCHOTT.
2. Experimental and Pathologico-anatomical Investigations Upon the Course of Certain Tracts of the Central Nervous System. G. MINGAZZINI.
3. Neurasthenic Melancholia. M. FRIEDMANN.
4. The Cytodiagnosis of Tabes Dorsalis. H. S. FRENKEL.

1. *Original Paranoia.*—After discussing the literature, Schott reports the case of a man, forty-nine years of age, with neuropathic heredity, whose character had always been peculiar. At the age of twenty-four it was observed that his mind was affected. There were hallucinations and delusions of persecution and grandeur. The course of the case was irregular, and in the periods of intermission all recollection of the periods of hallucinations was lost. Many symptoms resemble those of dementia præcox, but the long duration of the case would render such a diagnosis unlikely. Schott prefers a diagnosis of original paranoia, and thus the case indicates the significance of the deceptions of memory in these conditions.

2. *Nerve Tracts.*—Mingazzini concludes his long and valuable article upon the minute anatomy of the central nervous system.

3. *Neurasthenic Melancholia.*—Friedmann concludes his article upon neurasthenic melancholia. He reports a number of cases, and concludes that in about two per cent. of cases of neurasthenia the emotional depression reaches a degree which renders them peculiar. He recognizes different groups. A first, in which there are delusions, from which he reports at length a number of cases; a second, with nervous apathy and stupidity, and a third, with severe conditions of irritability and anxiety.

4. *Cytodiagnosis in Tabes.*—Widal's method of studying the cerebrospinal liquid is to allow 3 or 4 ccm. to flow from the cannula introduced into the spinal canal, into a centrifugating glass. The centrifuge is then revolved at the rate of 2,500 to 3,000 times a minute for ten minutes. The fluid is then poured off, the glass held perpendicular, and the thick drop which adheres to the end of the tube drawn off into a small glass tube by capillarity. This is then spread upon a cover-glass, washed with absolute alcohol and ether until all the crystals are removed, and then stained with Unna's polychrome methylene blue or hematin and eosin. The characteristic of tabes in this fluid is the great excess of lymphocytes. In twenty-three cases Frenkel found this to be the case. For making the lumbar puncture Frenkel prefers a trocar and cannula, which is thrust in between the fourth and fifth lumbar vertebræ. If the point of the trocar strikes bone he prefers to withdraw the instrument completely. If blood flows the first few centimeters may be drawn away, and the fluid is then usually clear. In-

fection is not likely, even if the instruments are not thoroughly sterile. The same results are found in general paralysis.

J. Sailer (Philadelphia.)

BRAIN

(Vol. 26, 1903, No. 4, Winter.)

1. Case of Progressive Muscular Atrophy of Spinal Origin in a Girl Aged Eleven Years: with Autopsy. Herbert, Morley, Fletcher and Frederick E. Batten.
2. Beri-Beri in Monkeys. Hamilton Wright and M. D. McGill.
3. Associated Movements in Hemiplegia: Their Origin and Physiological Significance. H. Campbell Thompson and F. R. C. P. Lond.
4. Experimental Research on the Course of the Optic Fibers. George Dean and C. H. Usher.
5. Post-diphtheretic Chronic Bulbar Paralysis and Its Distinction from Myasthenia. Wilfred Harris.
6. Degeneration Resulting from Lesions of Posterior Nerve Roots and from Transverse Lesions of the Spinal Cord in Man. A Study of Twenty Cases. James Collier and E. Farquhar Buzzard.

1. *Progressive Muscular Atrophy.*—The authors contribute the history and pathological findings of a case of progressive muscular atrophy of spinal origin occurring in a child. M. L., eleven years. Twelve months weakness of hands; seven months unable to button clothes; four months weakness of legs; two months adenoids removed, and much worse since that operation; fourteen days pain in back and increased difficulty in swallowing: intelligent, deaf, some atrophy of tongue, palate moves well on phonation, weakness of neck, respiration thoracic, upper intercostals only in use; claw hand, wrist drop, weakness of upper arm and shoulder muscles; can walk but only feebly, knee-jerks brisk, plantars flexor, sensation natural to all forms; electrical reaction R. D. in some muscles, in others only diminution of irritability. Sudden death from respiratory failure six months later.

The pathology of the condition was extremely intricate. By the Marchi method degeneration was discovered commencing about the twelfth thoracic segment, increasing with the eighth and seventh, and reaching its maximum intensity at the sixth, the gray matter being hard to distinguish from the surrounding white matter. The fibers occupied the region of the cord all round the gray matter of the anterior horns and somewhat the antero-lateral tracts. Other studies by the Nissl and Weigert methods were made. The authors summarize their findings as follows: (1) There was extensive destruction and atrophy of the cells of the anterior horn from the upper cervical to the lower thoracic segments, this change being most marked at the level of the sixth thoracic segment. The cells of Clarke's column were also affected. (2) There was extensive degeneration of the whole of the ventral region of the cord in the thoracic segments, the lesion being most marked at the level of the sixth thoracic segment, and diminishing in extent both toward the medulla and caudally. There was extensive degeneration in the direct cerebellar tracts, both dorsal and ventral, beginning in the lower thoracic segments and extending up to their respective terminations in the cerebellum. The degeneration affected both gray and white matter alike in that region of the cord which was most affected, viz.: the thoracic segments. (3) There was a marked increase of the connective tissue in the ventral portion of the cord in the thoracic region (4) The walls of the vessels showed no change; there was engorgement of vessels with extravasation of blood into the perivascular spaces. (5) The cord showed both recent and old degeneration.

2. *Beri-Beri in Monkeys.*—The authors conclude from their studies that beri-beri is present in monkeys as well as in man, and summarize as